



M4A79XTD EVO

New-Gen. 8+2 Phase Power Design for BEST O.C. Capability

- New-Gen. 8+2 Phase Power Design
- EPU
- TurboV
- Turbo Key
- ASUS Anti-Surge Protection

*Exclusively designed for latest **AM3 CPU** with **DDR3** support

For best compatibility, please refer to **CPU Support List.



CPU, Chipset and Graphics features

AMD® Phenom™ II/Athlon™ II/ Sempron™ 100 Series Processors (socket AM3)

This motherboard supports AMD® Socket AM3 multi-core processors with unique L3 cache and delivers better overclocking capabilities with less power consumption. It features dual-channel DDR3 1333 memory support and accelerates data transfer rate up to 5200MT/s via

HyperTransport™ 3.0 based system bus. This motherboard also supports AMD® CPUs in the new 45nm manufacturing process.



AMD® 790X / SB750 Chipset

AMD® 790X / SB750 Chipset is designed to support up to 5200MT/s HyperTransport™ 3.0 (HT3.0) interface speed and PCI Express™ 2.0 x 16 graphics. It is optimized with AMD's latest AM3 and multi-core CPUs to provide excellent system performance and overclocking capabilities.



Dual-Channel DDR3 1800(O.C.) Support

The motherboard supports DDR3 memory that features data transfer rates of 1800(O.C.)/1600/1333/1066 MHz to meet the higher bandwidth requirements of the latest operation system, 3D graphics, multimedia, and Internet applications. The dual-channel DDR3 architecture doubles the bandwidth of your system memory to boost system performance, eliminating bottlenecks with peak bandwidths of up to 25.6GB/s. Furthermore, the supply voltage for the memory is reduced from 1.8 V for DDR2 to just 1.5 V for DDR3. This voltage reduction limits the power consumption and heat generation of DDR3 which makes it an ideal memory solution.



ATI CrossFireX™ Technology

ATI's CrossFireX™ boosts image quality along with rendering speed, eliminating the need to scale down screen resolution to get high quality images. CrossFireX™ allows higher anti-aliasing, anisotropic filtering, shading, and texture settings. Adjust your display configurations, experiment with the advanced 3D settings, and check the effects with a real-time 3D-rendered previews within ATI Catalyst™ Control Center.



PCIe 2.0 support

This motherboard supports the latest PCIe 2.0 devices for double speed and bandwidth which enhances system performance.



ASUS Power Solutions

New-Gen. 8+2 Phase Power Design

To fully unleash the next-generation AM3 CPU's potential, the ASUS M4 Series motherboards have adopted a brand new 8-phase VRM power design. It delivers high power efficiency and supreme overclocking ability. Furthermore, high quality power components can effectively lower system temperature to ensure longer component lifespan. This series also features an extra 2 (or 1) phase power dedicated to integrated memory/HT controller.



ASUS Anti-Surge Protection

This special design prevents expensive devices and the motherboard from damage caused by power surges from switching power supply (PSU).



ASUS Green Design

EPU

The ASUS EPU (Energy Processing Unit) provides total system power management by detecting current PC loadings and intelligently moderating power in real-time. It automatically provides the most appropriate power usage for the CPU, VGA card, hard drives, and CPU/chassis fans- helping save power and money! *ASUS EPU is supported by AM3/AM2+ CPU only



ASUS Overclocking Tools

TurboV

Feel the adrenaline rush of real-time O.C. - now a reality with the ASUS TurboV. This easy O.C. tool allows you to overclock without exiting or rebooting the OS; and its user-friendly interface makes overclock with just a few clicks away. Moreover, the ASUS OC profiles in TurboV provides the best O.C. settings in different scenarios.



Turbo Key

ASUS Turbo Key allows the user to turn the PC power button into an overclocking button. After the easy setup, Turbo Key can boost performances without interrupting ongoing work or games - with just one touch!!



Precision Tweaker 2

Allows the user to adjust the CPU voltage in 0.0125v steps and NB/DRAM voltage in 0.02v steps to finetune voltage to achieve the most precise setting for the ultimate overclocking configuration.



Express Gate

Express Gate



Taking only 5 seconds to bootup, Express Gate is the one-stop gateway to instant fun! It's a unique motherboard built-in OS. You can utilize the most popular Instant Messengers (IM) like MSN, Skype, Google talk, QQ, and Yahoo! Messenger to keep in touch with friends, or quickly check on the weather and e-mails just before leaving your house. What's more, the user-friendly picture manager lets you view your pictures without entering Windows at anytime!

*The actual boot time is subject to hardware configurations and product models.



ASUS EZ DIY

Q-Shield

The specially designed ASUS Q-Shield does without the usual "fingers" - making it convenient and easy to install. With better electric conductivity, it ideally protects your motherboard against static electricity and shields it against Electronic Magnetic Interference (EMI).



Q-Connector

The ASUS Q-Connector allows you to connect or disconnect chassis front panel cables in one easy step with one complete module. This unique adapter eliminates the trouble of plugging in one cable at a time, making connection quick and accurate.



O.C. Profile

The motherboard features the ASUS O.C. Profile that allows users to conveniently store or load multiple BIOS settings. The BIOS settings can be stored in the CMOS or a separate file, giving users freedom to share and distribute their favorite settings.



MyLogo2

Personalize your system with customizable boot logo. You can convert your favorite photo into a 256-color boot logo for a more colorful and vivid image on your screen.



EZ-Flash 2

Simply update BIOS from a USB flash disk before entering the OS

EZ Flash 2 is a user-friendly BIOS update utility. Simply launch this tool and update BIOS from a USB flash disk before entering the OS. You can update your BIOS only in a few clicks without preparing an additional floppy diskette or using an OS-based flash utility.



ASUS Quiet Thermal Solution

Stylish Heatsink

The streamline-shaped heat-sink features 0-dB thermal solution that offers users a noiseless PC environment. Not only the beautifully curved fins upgrade the visual enjoyment for motherboard users, but also the special Streamline Airflow Guiding design lowers the temperature of the north bridge chipset through high efficient heat-exchange. Combined with usability and aesthetics, the ASUS streamline-shaped heat-sink will give users an extremely silent and cooling experience with the elegant appearance!



ASUS Q-Fan 2

ASUS Q-Fan2 technology intelligently adjusts both CPU fan and chassis fan speeds according to system loading to ensure quiet, cool and efficient operation.



ASUS Crystal Sound

DTS Surround Sensation UltraPC

DTS Surround Sensation UltraPC delivers exceptional 5.1 surround experience through the most common PC audio setups - your existing stereo speakers or headphones. In addition to virtual surround, "Bass enhancement" provides stronger low frequency bass sound, and "Voice clarification" provides clear human dialogue even with loud background sound. With these technologies, you may experience a better home-theater audio with ease.



Noise Filtering

Eliminate background noise while recording

This feature detects repetitive and stationary noises like computer fans, air conditioners, and other background noises then eliminates it in the incoming audio stream while recording.



To experience DTS Surround Sensation UltraPC, download the updated audio driver & latest BIOS at www.asus.com.

Industry Standard

SATA on the Go

The motherboard supports the next-generation hard drives based on the Serial ATA (SATA) 3Gb/s storage specification, delivering enhanced scalability and doubling the bus bandwidth for high-speed data retrieval and saves. The external SATA port located at the back I/O provides smart setup and hot-plug functions. Easily backup photos, videos and other entertainment contents on external devices.



IEEE 1394a interface

IEEE 1394a interface provides high speed digital interface for audio/video appliances such as digital television, digital video camcorders, storage peripherals & other PC portable devices.



High Definition Audio

Enjoy high-end sound system on your PC!

The onboard 8-channel HD audio (High Definition Audio, previously codenamed Azalia) CODEC enables high-quality 192KHz/24-bit audio output, jack-sensing feature, retasking functions and multi-streaming technology that simultaneously sends different audio streams to different destinations. You can now talk to your partners on the headphone while playing a multi-channel network games. All of these are done on one computer.



S/PDIF-out on Back I/O Port

This motherboard provides convenient connectivity to external home theater audio systems via coaxial and optical S/PDIF-out (SONY-PHILIPS Digital Interface) jacks. It allows to transfer digital audio without converting to analog format and keeps the best signal quality.



RoHS

GreenASUS

The motherboard and its packaging comply with the European Union's Restriction on the use of Hazardous Substances (RoHS). This is in line with the ASUS vision of creating environment-friendly and recyclable products and packaging to safeguard consumers' health while minimizing the impact on the environment.



Specifications

CPU	AMD Socket AM3 ;Phenom™II /Athlon™II /Sempron™ 100 Series Processors AMD Cool 'n' Quiet™ Technology Supports 45nm CPU
Chipset	AMD 790X/SB750
System Bus	Up to 5200 MT/s ; HyperTransport™ 3.0
Memory	4 x DIMM, Max. 16 GB, DDR3 1800(O.C.)/1600/1333/1066 ECC,Non-ECC,Un-buffered Memory Dual Channel memory architecture *Due to OS limitation, when installing total memory of 4GB capacity or more, Windows® 32-bit operation system may only recognize less than 3GB. Hence, a total installed memory of less than 3GB is recommended. **Refer to www.asus.com for the memory QVL (Qualified Vendors Lists).
Expansion Slots	2 x PCIe 2.0 x16 , support ATI CrossFireX™ technology (at one x16 or dual x8 link) 2 x PCIe x1 2 x PCI 2.2
Storage	SB750 Chipset 1 xUltraDMA 133/100/66 for up to 2 PATA devices 6 xSATA 3 Gb/s ports Support RAID 0,1,5,10,JBOD Marvell 88SE6121 SATA controller 1 xInternal SATA 3Gb/s port(black) 1 xExternal SATA 3Gb/s port (SATA on-the-go)

LAN	Realtek® 8112L Gigabit LAN controllers
Audio	VIA® VT1708S 8-Channel High Definition Audio CODEC DTS Surround Sensation UltraPC Supports Jack-Detection, Multi-Streaming, and Front Panel Jack-Retasking Optical S/PDIF Out ports at back I/O ASUS Noise Filtering
IEEE 1394	VIA® VT6315N controller supports 2 x 1394a ports (1 at mid-board; 1 at back panel)
USB	12 USB 2.0/1.1 ports (4 ports at mid-board, 8 ports at back panel)
ASUS Unique Features	ASUS Power Solutions: - ASUS New-Gen. 8+2 Phase Power Design - ASUS Anti-Surge Protection ASUS Green Design: - EPU Express Gate ASUS Quiet Thermal Solution: - ASUS Fanless Design: Stylish heat-sink solution - ASUS Q-Fan2 ASUS EZ DIY: - ASUS Q-Shield - ASUS Q-Connector - ASUS CrashFree BIOS 3 - ASUS O.C. Profile - ASUS EZ Flash 2
Overclocking Features	Intelligent overclocking tools - AI Overclocking (intelligent CPU frequency tuner) - TurboV - Turbo Key Precision Tweaker 2 - vDIMM: 50 -step DRAM voltage control - vCore: Adjustable CPU voltage at 0.0125V increment - vChipset 16-step voltage control SFS (Stepless Frequency Selection) - FSB tuning from 200MHz up to 600MHz at 1MHz increment - PCI Express frequency tuning from 100MHz up to 150MHz at 1MHz increment Overclocking Protection - ASUS C.P.R.(CPU Parameter Recall)
Special Features	100% All High-quality Conductive Polymer Capacitors! ASUS MyLogo 2 AMD OverDrive Support* *Advanced cooling system is required when advanced overclock functions of AMD OverDrive are enabled.
Back Panel I/O Ports	1 x PS/2 Keyboard port (Purple) 1 x PS/2 mouse port (Green) 1 x S/PDIF Out port (Optical) 1 x eSATA 1 x IEEE 1394a port 1 x LAN (RJ45) port 8 x USB 2.0/1.1 ports 8-Channel Audio I/O ports
Internal I/O Connectors	2 x USB connectors (4 ports) 1 x IDE connector 7 x SATA connectors 1 x IEEE 1394a connector 1 x CPU Fan connector 2 x Chassis Fan connector 1 x Power Fan connector System Panel (Q-Connector) 1 x COM connector 1 x Chassis Intrusion Front panel audio connector 1 x S/PDIF Out header CD audio in 24-pin ATX Power connector 4-pin ATX 12V Power connector

BIOS	8 Mb Flash ROM , AMI BIOS, PnP, DMI2.0, WfM2.0, SM BIOS 2.3, ACPI 2.0a, ASUS EZ Flash 2, ASUS CrashFree BIOS 3
Manageability	WOL by PME,WOR by PME,WOR by Ring,Chasis Intrusion,PXE
Accessories	User's manual 1 x I/O Shield 1 x UltraDMA 133/100/66 cable 4 x SATA cable(s) 2-in-1 Q-connector (USB, System panel; Retail version only)
Support Disc	Drivers ASUS PC Probe II Express Gate ASUS AI Suite Anti-virus software (OEM version) ASUS Update AMD OverDrive Utility (AOD)
Form Factor	ATX Form Factor 12 inch x 9.6 inch (30.5 cm x 24.4 cm)